

## ABSTRACT OF THE DISCLOSURE

This invention is intended to control the amount of power to be supplied to a fusing heater below a maximum applicable current value. The engine controller supplies electricity to both of two heating bodies at the same fixed duty  $D_1$ . At a phase angle  $\alpha_1$  corresponding to the fixed duty  $D_1$ , pulse signals ON1 and ON2 are issued in response to a ZEROX signal as a trigger. A current value  $I_1$  is detected based on a HCRRT signal from the current detection circuit. The engine controller calculates an upper limit of applicable power duty  $D_{limit}$  based on the detected current value  $I_1$ , the fixed duty  $D_1$  and the preset applicable current value  $I_{limit}$ . Then, a PI temperature control is performed at a duty below the upper limit duty  $D_{limit}$ .